REMARKS

Favorable reconsideration and allowance of the present patent application are respectfully requested in view of the following remarks. Claims 1-17 are pending. Claims 16 and 17 have been added by this Reply. Claims 1 and 8 are independent.

Objection to Specification

In the Office Action, the specification is objected to as containing informalities. More specifically, pages 14, 17, and 19 are asserted to have typing errors. Regarding pages 17 and 19, the particular referenced lines have been amended to address the issues noted in the Office Action.

Regarding page 14, it is noted pages 13 and 14 are identical. Therefore, as noted above, page 14 has been deleted in its entirety. Instead, for the particular changes requested for page 14, the corresponding lines of page 13 have been amended.

In addition, other parts of the specification have been amended, as noted above. No new matter has been introduced.

Withdrawal of the objection to the specification is, therefore, respectfully requested.

Objection to Drawings

In the Office Action, FIG. 5 is objected to on the grounds that it does not show a second optical card 518, as described in the specification.

FIG. 5 has been amended to add the second optical card 518 and attendant connections, thereby responding to the drawing objection. Support for this change may be found, for example, on page 17 of the specification.

In addition, FIG. 4 has been amended to enhance consistency with the specification by adding the label "401" to the STS frame (see page 13, lines 11-16 for support). No new matter has been introduced.

Applicant respectfully requests that the corrected formal drawings be approved and made a part of the record of the above-identified application.

Applicant respectfully requests withdrawal of the objection to the drawings and approval of the revised formal drawings.

Rejection under 35 U.S.C. §112, second paragraph

Claims 4 and 11 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. These claims have been amended to address the issues noted by the Examiner.

Accordingly, Applicant respectfully requests withdrawal of the rejection of claims 4 and 11 under 35 U.S.C. §112, second paragraph.

Rejection under 35 U.S.C. §102(e) over Chen

Claims 1-14 stand rejected under 35 U.S.C. §102(e) as being anticipated by Chen et al. (U.S. Patent No. 6,501,758). Applicant respectfully traverses this rejection.

For a Section 102 rejection to be proper, the cited reference must teach or suggest each and every claimed element. See M.P.E.P. 2131; M.P.E.P. 706.02. Thus, if the cited reference fails to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

In this instance, independent claim 1 recites, in part, "subdividing a portion of the data frames comprising a SONET/SDH layer into two or more logical channels." Independent claim 8 recites a similar feature. Chen does not teach or suggest at least this feature. Thus, independent claims 1 and 8 are not anticipated by Chen.

More specifically, Chen is directed to facilitating hybrid ATM/TDM transport over a fiber ring. See column 1, lines 10-15. Chen discloses that a node of a fiber optic ring includes a signal manager which receives incoming signals having a plurality of formats, converts the incoming signals a uniform transport signal for communication among devices within the node, routes the converted transport signals to either the synchronous transfer mode (STM) switching fabric or the asynchronous transfer mode (ATM)

switching fabric, depending on the processing needs of each incoming signal. See column 3, lines 1-24; column 4, lines 6-10. After processing by the respective STM switching fabric and the ATM switching fabric, the process signals destined for another node on the fiber ring are formatted for appropriate transmission over the fiber ring. See column 4, lines 28-43.

In contrast to the assertion in the Office Action, Chen does not teach or suggest subdividing a SONET/SDH layer into a plurality of logical channels, as recited in independent claims 1 and 8. At best, Chen may suggest formatting the output of the STM switching fabric into its own layer, separate and apart from formatting the output from the ATM switching fabric to its layer. Indeed, Chen discloses that the STM switching fabric maps outgoing signals carrying TDM information bound for a common destination into a synchronous payload envelope. See column 5, lines 57-60. Chen also discloses that the ATM switching fabric maps signals into its own synchronous payload envelope. This clearly indicates that the STM and the ATM switching fabrics format data frames to be transported into the layer of each, rather than a layer that can include multiple logical channels.

The separateness of payload envelopes is further evidenced in the flowcharts depicted in FIGS. 4A-4C. For example, in FIG. 4B, TDM signals are mapped to a first synchronous payload envelope, and

ATM signals are mapped to a second payload envelope. Also, as shown in FIG. 4C, this concept is taken one step further in that each payload envelope is sent over physically different paths over the fiber optic network.

In addition, independent claim 1 recites, in part, "monitoring the SONET/SDH ring transmission to determine protection mechanisms associated with each logical channel." Chen fails to teach or suggest at least this feature, as well. As demonstrated above, Chen does not teach or suggest the concept of a SONET/SDH layer including logical channels. It, therefore, naturally follows that Chen cannot teach or suggest the above-cited feature.

Further, the logic presented in the Office Action, which alleges that Chen teaches the above-noted feature, is flawed. It is asserted that the automatic protection switching selector identifies predetermined ATM carrying channels and disables switching protection for these predesignated ATM carrying channels. See Office Action, page 4, lines 19-23. However, it is noted that the particular embodiment referenced clearly discloses that the TDM information and the ATM information are carried on physically separate fiber connections. The automatic protection switching selector merely ensures that TDM traffic and ATM traffic are not mixed onto the same physical path. This cannot be reasonable be

interpreted as teaching or suggesting the above-cited feature of independent claims 1 and 8 of the present invention.

For at least the above reasons, independent claims 1 and 8 are not anticipated by Chen. Claims 2-7 and 9-14 depend directly or indirectly from independent claims 1 and 8. Therefore, for at least the reasons stated above with respect to independent claims 1 and 8, these dependent claims are also not anticipated by Chen.

Applicant respectfully requests withdrawal of the rejection of claims 1-14 based on Chen under 35 U.S.C. §102(e).

Rejection under 35 U.S.C. §103(a) over Chen and Bisson

Claim 15 stands rejected under 35 U.S.C. §103(a) over Chen in view of Bisson et al. (U.S. Patent No. 6,349,092). Applicant respectfully traverses this rejection.

For a Section 103 rejection to be proper, a prima facie case of obviousness must be established. See M.P.E.P. 2142. One requirement to establish prima facie case of obviousness is that the prior art references, when combined, must teach or suggest all claim limitations. See M.P.E.P. 2142; M.P.E.P. 706.02(j). Thus, if the cited references fail to teach or suggest one or more elements, then the rejection is improper and must be withdrawn.

Claim 15 depends from independent claim 8. Claim 8 recites, in part, "a first circuit configured to subdivide a portion of data frames comprising a SONET/SDH layer into two or more logical

channels" and "a first circuit operable to monitor the SONET/SDH layer to determine protection mechanisms associated with each logical channel." It has been shown above that Chen does not teach or suggest at least these features. Bisson has not been, and indeed cannot be, relied upon to cure at least this deficiency of Chen. Therefore, independent claim 8 is not rendered obvious by the combination of Chen and Bisson.

For at least due to its dependency from claim 8, claim 15 is also not rendered obvious by the combination of Chen and Bisson.

Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. §103(a) of claim 15 based on Chen and Bisson.

CONCLUSION

All objections and rejections raised in the Office Action having been addressed, it is respectfully submitted that the present application is in condition for allowance and such allowance is respectfully solicited. Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Hyung Sohn (Reg. No. 44,346), to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees

required under 37 C.F.R. §§ 1.16 or 1. 17, particularly extension of time fees.

> Respectfully submitted, BIRCH, STEWART, KOLASCH & BIRCH, LLP

Michael R. Cammarata

Reg. No. 39,491

P. O. Box 747

Falls Church, VA 22040-0747

(703) 205-8000

4450-249P

MRC:HNS:rk